

Title (en)
METHOD AND APPARATUS FOR IN-PATH TARGET DETERMINATION FOR AN AUTOMOTIVE VEHICLE USING A GYROSCOPIC DEVICE

Title (de)
VERFAHREN UND GERÄT ZUR ERFASSUNG DER ANWESENHEIT EINES KRAFTFAHRZEUGS AUF EINERBAHN MIT VERWENDUNG EINER KREISELVORRICHTUNG

Title (fr)
PROCEDE ET APPAREIL PERMETTANT DE DETERMINER LA PRESENCE D'UNE CIBLE SUR LA TRAJECTOIRE D'UN VEHICULE AUTOMOBILE MUNI D'UN DISPOSITIF GYROSCOPIQUE

Publication
EP 1025454 A1 20000809 (EN)

Application
EP 98953290 A 19981007

Priority
• US 9821109 W 19981007
• US 94777297 A 19971009

Abstract (en)
[origin: WO9919745A1] The present invention concerns a method, an apparatus and an article of manufacture that satisfies the need for determining whether or not an obstacle vehicle is in the path of a host vehicle. Specifically, the present invention satisfies the above stated regardless of whether or not the host vehicle is moving in a straight path or along a curved path. Preferably, input data ("input") is collected from instruments mounted to a host vehicle. The input is used to calculate for the host vehicle the average turn rate, the radius of curvature of the path being traveled, the velocity, and a range from the host vehicle to an obstacle vehicle. Additionally, the input is used to determine the deviation of an obstacle vehicle. Additionally, the input is used to determine the deviation of an obstacle from a 0 DEG reference azimuth extending through the center of a radar beamating from a radar unit mounted to the host vehicle. An obstacle azimuth angle alpha i, is calculated and used to determine whether or not the obstacle is in the path of the host vehicle. After a determination is made as to whether or not the obstacle is in the path of the host vehicle, the results of that determination are sent to and displayed by sensors and displays which designate the results.

IPC 1-7
G01S 13/93

IPC 8 full level
G01C 19/00 (2006.01); **G01S 13/931** (2020.01); **B60K 31/00** (2006.01); **B60R 21/00** (2006.01); **B60W 30/00** (2006.01); **G08G 1/16** (2006.01); **G01S 13/86** (2006.01)

CPC (source: EP KR US)
B60K 31/0008 (2013.01 - EP US); **B60W 30/18145** (2013.01 - EP); **G01S 13/88** (2013.01 - KR); **G01S 13/931** (2013.01 - EP US); **B60W 2552/20** (2020.02 - EP US); **B60W 2552/30** (2020.02 - EP); **G01S 13/86** (2013.01 - EP US); **G01S 2013/932** (2020.01 - EP US); **G01S 2013/9321** (2013.01 - EP US); **G01S 2013/9325** (2013.01 - EP US); **G01S 2013/93271** (2020.01 - EP US); **G01S 2013/93273** (2020.01 - EP US); **G01S 2013/93274** (2020.01 - US)

Citation (search report)
See references of WO 9919745A1

Designated contracting state (EPC)
DE ES FR GB IT NL SE

DOCDB simple family (publication)
WO 9919745 A1 19990422; **WO 9919745 A8 20000727**; AR 015179 A1 20010418; AU 1070099 A 19990503; AU 743214 B2 20020124; BR 9812891 A 20000808; CA 2304586 A1 19990422; CA 2304586 C 20051206; EP 1025454 A1 20000809; JP 2001520389 A 20011030; KR 20010030979 A 20010416; US 5959569 A 19990928; ZA 989209 B 19990423

DOCDB simple family (application)
US 9821109 W 19981007; AR P980105063 A 19981013; AU 1070099 A 19981007; BR 9812891 A 19981007; CA 2304586 A 19981007; EP 98953290 A 19981007; JP 2000516242 A 19981007; KR 20007003744 A 20000407; US 94777297 A 19971009; ZA 989209 A 19981008